

A MESOPOROUS CATALYST SUPPORT, A CATALYST SYSTEM, AND METHOD  
OF MAKING AND USING SAME FOR OLEFIN POLYMERIZATION

ABSTRACT OF THE INVENTION

This invention relates to a catalyst system comprising a catalyst and a support comprising a non-layered inorganic porous crystalline phase material, wherein the support comprises a hexagonal arrangement of uniformly-sized pores having an average pore diameter greater than or equal to about 13Å, an X-ray diffraction pattern having a calculated  $d_{100}$  value of greater than or equal to about 18Å, an adsorption capacity of greater than or equal to about 15 grams benzene per 100 grams support at 50 torr and at 25°C, and a pore wall thickness of less than or equal to about 25Å.